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(75) Inventors: **Andrew C. Payne**, Lincoln, MA (US);
Lawrence C. Stewart, Burlington, MA (US); **David J. Mackle**, Brookdale, CA (US)

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(73) Assignee: **Soverain Software LLC**, Chicago, IL (US)

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(58) **Field of Classification Search** None
 See application file for complete search history.

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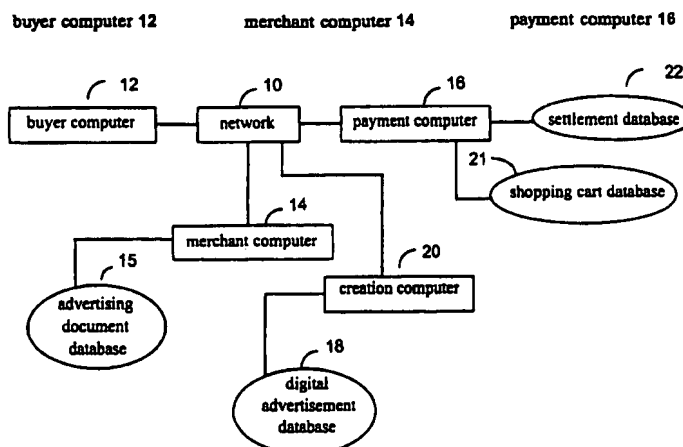
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ABSTRACT

A network-based sales system includes at least one buyer computer for operation by a user desiring to buy a product, at least one merchant computer, and at least one payment computer. The buyer computer, the merchant computer, and the payment computer are interconnected by a computer network. The buyer computer is programmed to receive a user request for purchasing a product, and to cause a payment message to be sent to the payment computer that comprises a product identifier identifying the product. The payment computer is programmed to receive the payment message, to cause an access message to be created that comprises the product identifier and an access message authenticator based on a cryptographic key, and to cause the access message to be sent to the merchant computer. The merchant computer is programmed to receive the access message, to verify the access message authenticator to ensure that the access message authenticator was created using the cryptographic key, and to cause the product to be sent to the user desiring to buy the product.



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Exhibit 3 of Geringer Declaration: Excerpts of Deposition of Richard Boake.

Exhibit 5 of Geringer Declaration: Excerpts of Deposition of Andrew Payne.

Exhibit 6 of Geringer Declaration: E-mail from Andrew Payne to Winfield Treese, et al. (Jun. 15, 1994).

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EX PARTE
REEXAMINATION CERTIFICATE
ISSUED UNDER 35 U.S.C. 307

THE PATENT IS HEREBY AMENDED AS
INDICATED BELOW.

Matter enclosed in heavy brackets [] appeared in the patent, but has been deleted and is no longer a part of the patent; matter printed in italics indicates additions made to the patent.

AS A RESULT OF REEXAMINATION, IT HAS BEEN DETERMINED THAT:

The patentability of claims 1–38 is confirmed.

New claims 39–108 are added and determined to be patentable.

39. A hypertext statement system in accordance with claim 15, wherein the network is an Internet.

40. A hypertext statement system in accordance with claim 15, wherein the client computer is a buyer computer, and at least one of the server computers is a payment computer.

41. A hypertext statement system in accordance with claim 15, wherein the statement document is sent by at least one of the server computers to the client computer in response to a statement URL sent by the client computer to at least one of the server computers.

42. A hypertext statement system in accordance with claim 41, wherein the statement URL includes a URL authenticator that is a digital signature based on a cryptographic key; wherein the URL authenticator is a hash of information contained in the statement URL; wherein at least one of the server computers verifies whether the statement URL authenticator was created based upon the information contained in the statement URL using the cryptographic key.

43. A hypertext statement system in accordance with claim 42, wherein if verification by at least one of the server computers fails, then at least one of the server computers sends a document to the client computer indicating that access is denied.

44. A hypertext statement system in accordance with claim 42, wherein the statement URL comprises a client computer network address;

wherein the client computer network address is verified by matching it with the network address specified in the statement URL.

45. A hypertext statement system in accordance with claim 44, wherein if verification fails, then at least one of the server computers sends a document to the client computer indicating that access is denied.

46. A hypertext statement system in accordance with claim 42, wherein the client computer prompts the user for an account name and password by creating an account name prompt and a password prompt.

47. A hypertext statement system in accordance with claim 46, wherein at least one of the server computers verifies that the account name and password provided by the user match a previously provided account name and password.

48. A hypertext statement system of claim 47, wherein if the account name and password verification fails, then at least one of the server computers sends a document to the client computer indicating that access to at least a portion of a network sales system is denied.

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49. A hypertext statement system of claim 44, wherein if a payment amount exceeds a threshold, then the user is prompted for security-related information;

wherein at least one of the server computers verifies that the security-related information matches previously provided security-related information.

50. A hypertext statement system in accordance with claim 49, wherein if the security-related verification fails, then the payment computer sends a document to the buyer computer indicating that access is not allowed.

51. A hypertext statement system in accordance with claim 49, wherein at least one of the server computers transmits the statement document to the client computer, and the client computer displays the statement document to the user.

52. A hypertext statement system in accordance with claim 51, wherein the client computer is a buyer computer;

wherein at least one of the server computers retrieves settlement data from a settlement database for use in generating the statement document.

53. A hypertext statement system in accordance with claim 15, wherein the transaction detail hypertext link includes a transaction detail URL;

wherein the transaction detail URL includes a URL authenticator that is a digital signature based on a cryptographic key;

wherein the URL authenticator is a hash of information contained in the transaction detail URL;

wherein at least one of the server computers verifies whether the transaction detail authenticator was created from information contained in the transaction detail URL based upon the cryptographic key;

wherein the transaction detail URL comprises a client network address;

wherein the client computer network address is verified by matching it with the network address specified in the transaction detail URL;

wherein the client computer prompts the user for an account name and password by creating an account name prompt and a password prompt;

wherein at least one of the server computers verifies that the account name and password entered by the user match a previously provided account name and password;

wherein if a payment amount exceeds a threshold, then the user is prompted for security-related information;

wherein at least one of the server computers verifies that the security-related information matches previously provided security-related information.

54. A hypertext statement system in accordance with claim 53, wherein the client computer is a buyer computer, and at least one of the server computers is a payment computer.

55. A hypertext statement system in accordance with claim 15, wherein the user requests customer service;

wherein in response to the user request, the client computer sends a customer service URL to at least one of the server computers, and at least one of the server computers creates a customer service form and sends the form to the client computer;

wherein the form contains an area for the user to provide comments.

56. A hypertext statement system in accordance with claim 55, wherein the client computer sends the user's comments to at least one of the server computers;

wherein at least one of the server computers processes the user comments.

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57. A hypertext statement system in accordance with claim 15, wherein the user requests display of a product listed on the statement document.

58. A hypertext statement system in accordance with claim 57, wherein the client computer sends an access URL to a second server computer.

59. A hypertext statement system in accordance with claim 58, wherein the access URL comprises an authenticator based on a cryptographic key;

wherein the access URL authenticator is a hash of other information in the access URL;

wherein the second server computer verifies whether the access URL authenticator was created from information contained in the access URL using a cryptographic key;

wherein the access URL comprises a duration of time for access indicator; and the second server computer verifies whether the duration time for access has expired;

wherein the access URL comprises a buyer network address indicator; and the second server computer verifies that a buyer computer network address is the same as the buyer network address indicated in the access URL;

wherein the second server transmits a fulfillment document to the client computer.

60. A hypertext statement system in accordance with claim 15, wherein the statement document includes information on transactions by the user that took place in a given month.

61. A hypertext statement system in accordance with claim 60, wherein the information on transactions by the user includes at least one of the following types of information: a date of transaction, an identification of the product, a payment amount, and a merchant identifier.

62. A hypertext statement system in accordance with claim 60, wherein the statement document also includes one or more links to information regarding previous transactions by the user.

63. A hypertext statement system in accordance with claim 60, wherein for a transaction there is a transaction detail URL that includes a transaction identifier, a buyer network address, and a transaction detail URL authenticator.

64. A hypertext statement system in accordance with claim 63, wherein at least one of the server computers receives the transaction detail URL;

wherein the transaction detail URL includes a URL authenticator that is a digital signature based on a cryptographic key;

wherein the URL authenticator is a hash of information contained in the transaction detail URL;

wherein at least one of the server computers verifies whether the transaction detail URL authenticator was created from information contained in the transaction detail URL using the cryptographic key;

wherein the transaction detail URL comprises a client computer network address, and the client computer network address is verified by matching it with the network address specified in the transaction detail URL;

wherein the client computer prompts the user for an account name and password by creating an account name prompt and a password prompt, and at least one of the server computers verifies that the account name and password entered by the user match a previously provided account name and password;

wherein if a verification by at least one of the server computers fails, then at least one of the server com-

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puters sends a document to the client computer indicating that access is denied.

65. A hypertext statement system of claim 15, wherein if a payment amount provided by the user exceeds a threshold, then the user is prompted for security-related information, and at least one of the server computers verifies that the security information matches previously provided security-related information.

66. A hypertext statement system in accordance with claim 15, wherein the transaction detail document includes transaction information and merchant information.

67. A hypertext statement system in accordance with claim 66, wherein the transaction information includes at least one of the following types of information: a URL where a product is located, a transaction log identifier, a currency type used, a transaction date, an expiration time, an initiator number, a product description, a transaction amount, a beneficiary number, an IP address, a transaction type indicator, and a domain corresponding to the product.

68. A hypertext statement system in accordance with claim 66, wherein the merchant information includes at least one of the following types of information: a merchant telephone number, a merchant address, a merchant FAX number, a merchant e-mail address, a merchant principal name, a merchant home URL, and a merchant country.

69. A hypertext statement system in accordance with claim 66, wherein the transaction detail document comprises a customer feedback form, including the following fields for data entry by the user: account name, e-mail address, subject, and comments.

70. A hypertext statement system in accordance with claim 69, wherein the customer feedback form includes a hyperlink that a user activates to send the form to at least one of the server computers.

71. A hypertext statement system in accordance with claim 66, wherein the transaction detail document comprises a message to the user inviting comments by e-mail and giving an e-mail address.

72. A hypertext statement system in accordance with claim 66, wherein the transaction detail document further comprises a message to the user inviting comments by FAX and giving a FAX number.

73. A hypertext statement system in accordance with claim 15, wherein a digital advertising document is provided to the client computer.

74. The method of claim 16, wherein the network is an Internet.

75. The method of claim 16, wherein the client computer is a buyer computer; and at least one of the server computers is a payment computer.

76. The method of claim 16, wherein the statement document is sent by at least one of the server computers to the client computer in response to a statement URL sent by the client computer to at least one of the server computers.

77. The method of claim 76, wherein the statement URL includes a URL authenticator that is a digital signature based on a cryptographic key;

wherein the URL authenticator is a hash of information contained in the statement URL;

wherein at least one of the server computers verifies whether the statement URL authenticator was created based upon the information contained in the statement URL using the cryptographic key.

78. The method of claim 77, wherein if verification by at least one of the server computers fails, then at least one of the server computers sends a document to the client computer indicating that access is denied.

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79. The method of claim 77, wherein the statement URL comprises a client computer network address;

wherein the client computer network address is verified by matching it with the network address specified in the statement URL.

80. The method of claim 79, wherein if verification fails, then at least one of the server computers sends a document to the client computer indicating that access is denied.

81. The method of claim 77, wherein the client computer prompts the user for an account name and password by creating an account name prompt and a password prompt.

82. The method of claim 81, wherein at least one of the server computers verifies that the account name and password provided by the user match a previously provided account name and password.

83. The method of claim 82, wherein if the account name and password verification fails, then at least one of the server computers sends a document to the client computer indicating that access to at least a portion of a network sales system is denied.

84. The method of claim 79, wherein if a payment amount exceeds a threshold, then the user is prompted for security-related information;

wherein at least one of the server computers verifies that the security-related information matches previously provided security-related information.

85. The method of claim 84, wherein if the security-related verification fails, then the payment computer sends a document to the buyer computer indicating that access is not allowed.

86. The method of claim 84, wherein at least one of the server computers transmits the statement document to the client computer and the client computer displays the statement document to the user.

87. The method of claim 86, wherein the client computer is a buyer computer;

wherein at least one of the server computers retrieves settlement data from a settlement database for use in generating the statement document.

88. The method of claim 16, wherein the transaction detail hypertext link includes a transaction detail URL;

wherein the transaction detail URL includes a URL authenticator that is a digital signature based on a cryptographic key;

wherein the URL authenticator is a hash of information contained in the transaction detail URL;

wherein at least one of the server computers verifies whether the transaction detail URL authenticator was created from information contained in the transaction detail URL based upon the cryptographic key;

wherein the transaction detail URL comprises a client network address;

wherein the client computer network address is verified by matching it with the network address specified in the transaction detail URL;

wherein the client computer prompts the use for an account name and password by creating an account name prompt and a password prompt;

wherein at least one of the server computers verifies that the account name and password entered by the user match a previously provided account name and password;

wherein if a payment amount exceeds a threshold, then the user is prompted for security-related information;

wherein at least one of the server computers verifies that the security-related information matches previously provided security-related information.

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89. The method of claim 88, wherein the client computer is a buyer computer, and at least one of the server computers is a payment computer.

90. The method of claim 16, wherein the user requests customer service;

wherein in response to the user request, the client computer sends a customer service URL to at least one of the server computers, and at least one of the server computers creates a customer service form and sends the form to the client computer;

wherein the form contains an area for the user to provide comments.

91. The method of claim 90, wherein the client computer sends the user's comments to at least one of the server computers;

wherein at least one of the server computers processes the user comments.

92. The method of claim 16, wherein the user requests display of a product listed on the statement document.

93. The method of claim 92, wherein the client computer sends an access URL to a second server computer.

94. The method of claim 93, wherein the access URL comprises an authenticator based on a cryptographic key;

wherein the access URL authenticator is a hash of other information in the access URL;

wherein the second server computer verifies whether the access URL authenticator was created from information contained in the access URL using a cryptographic key;

wherein the access URL comprises a duration of time for access indicator, and the second server computer verifies whether the duration time for access has expired;

wherein the access URL comprises a buyer network address indicator, and the second server computer verifies that a buyer computer network address is the same as the buyer network address indicated in the access URL;

wherein the second server transmits a fulfillment document to the client computer.

95. The method of claim 16, wherein the statement document includes information on transactions by the user that took place in a given month.

96. The method of claim 95, wherein the information on transactions by the user includes at least one of the following types of information: a date of transaction, an identifier of the product, a payment amount, and a merchant identifier.

97. The method of claim 95, wherein the statement document also includes one or more links to information regarding previous transactions by the user.

98. The method of claim 95, wherein for a transaction there is a transaction detail URL that includes a transaction identifier, a buyer network address, and a transaction detail URL authenticator.

99. The method of claim 98, wherein at least one of the server computers receives the transaction detail URL;

wherein the transaction detail URL includes a URL authenticator that is a digital signature based on a cryptographic key;

wherein the URL authenticator is a hash of information contained in the transaction detail URL;

wherein at least one of the server computers verifies whether the transaction detail URL authenticator was created from information contained in the transaction detail URL using the cryptographic key;

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wherein the transaction detail URL comprises a client computer network address, and the client computer network address is verified by matching it with the network address specified in the transaction detail URL;

wherein the client computer prompts the user for an account name and password by creating an account name prompt and a password prompt, and at least one of the server computers verifies that the account name and password entered by the user match a previously provided account name and password;

wherein if a verification by at least one of the server computers fails, then at least one of the server computers sends a document to the client computer indicating that access is denied.

100. The method of claim 16, wherein if a payment amount provided by the user exceeds a threshold, then the user is prompted for security-related information, and at least one of the server computers verifies that the security information matches previously provided security-related information.

101. The method of claim 16, wherein the transaction detail document includes transaction information and merchant information.

102. The method of claim 101, wherein the transaction information includes at least one of the following types of information: a URL where a product is located, a transaction log identifier, a currency type used, a transaction date,

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an expiration time, an initiator number, a product description, a transaction amount, a beneficiary number, an IP address, a transaction type indicator, and a domain corresponding to the product.

103. The method of claim 101, wherein the merchant information includes at least one of the following types of information: a merchant telephone number, a merchant address, a merchant FAX number, a merchant e-mail address, a merchant principal name, a merchant home URL, and a merchant country.

104. The method of claim 101, wherein the transaction detail document comprises a customer feedback form, including the following fields for data entry by the user: account name, e-mail address, subject, and comments.

105. The method of claim 104, wherein the customer feedback form includes a hyperlink that a user activates to send the form to at least one of the server computers.

106. The method of claim 101, wherein the transaction detail document comprises a message to the user inviting comments by e-mail and giving an e-mail address.

107. The method of claim 101, wherein the transaction detail document further comprises a message to the user inviting comments by FAX and giving a FAX number.

108. The method of claim 16, wherein a digital advertising document is provided to the client computer.

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